

AMENDMENTS TO THE CLAIMS

Please replace the claims, including all prior versions, with the listing of claims below.

LISTING OF CLAIMS:

1. (Withdrawn) A method for manufacturing an information storage system comprising:

at least one read/write head comprising a transducer for information introduction and/or retrieval from the information storage medium; and an actuator supporting at least one read/write head for moving the transducer relative to the information storage medium;

depositing a composite nickel coating on a non-magnetic substrate, the composite nickel coating including an electrolessly deposited nickel layer formed on a sputter deposited nickel layer,

eliminating a subsequent polishing step, and

depositing a magnetic recording layer on the composite nickel coating.
2. (Withdrawn) The method of claim 1 wherein the sputter deposited nickel layer comprises nickel-phosphorus.
3. (Withdrawn) The method of claim 1 wherein the electrolessly deposited nickel layer comprises nickel-phosphorus.
4. (Withdrawn) The method of claim 1 wherein the sputter deposited nickel layer has a thickness in a range of about 10 Å to about 1000 Å.

5. (Withdrawn) The method of claim 1 wherein the electrolessly deposited nickel layer has a thickness in a range of about 0.5 microns to about 10 microns.

6-12. (Canceled)

13. (Withdrawn) The method of claim 1, wherein the surface roughness (Ra) is an average of a 10 micron x 10 micron scan of a surface of the composite nickel coating by an atomic field microscopy.

14. (Canceled)

15. (Withdrawn) The method of claim 1, wherein the composite nickel coating has a surface roughness (Ra) less than about 10 Å.

16. (Currently Amended) A magnetic recording medium comprising, in this order:

(a) a non-magnetic substrate,

(b) a composite nickel coating comprising a sputter deposited nickel layer and an electrolessly deposited nickel layer, the composite nickel coating having a bottom surface contacting the non-magnetic substrate and a top surface, and

(c) a magnetic recording layer on the top surface of the composite nickel coating,
wherein the top surface of the composite nickel coating is a non-polished surface and has an as-deposited composite nickel coating formed without polishing on a non-magnetic substrate, the

~~composite nickel coating including an electrolessly deposited nickel layer formed on a sputter deposited nickel layer, and~~

~~depositing a magnetic recording layer on the composite nickel coating, wherein the composite nickel coating has a surface roughness (Ra) less than about 10 Å with the magnetic recording layer thereon, wherein the surface roughness (Ra) is averaged over the entire surface of the top surface of the composite nickel coating.~~

17. (Currently amended) A magnetic recording medium of claim 16, ~~formed by depositing a composite nickel coating on a non-magnetic substrate and eliminating a subsequent polishing step prior to depositing a magnetic recording layer on the composite nickel coating wherein the bottom surface of the composite nickel coating directly contacts the non-magnetic substrate.~~

18. (New) A magnetic recording medium of claim 16, wherein the top surface of the composite nickel directly contacts the magnetic layer.

19. (New) A magnetic recording medium of claim 16, wherein the non-magnetic substrate comprises glass or a glass-ceramic material.

20. (New) A magnetic recording medium of claim 16, the electrolessly deposited nickel layer comprises NiP.

21. (New) A magnetic recording medium of claim 16, the electrolessly deposited nickel layer comprises NiP comprising about 15 atomic percent to about 30 atomic percent Ni.